CHAPTER 8. CONDUCT A DETAILED PROCESS/ TASK INSPECTION

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3651 (New)

B. Avionics: 5651 (New)

3. OBJECTIVE. This chapter provides guidance for conducting a detailed process/task inspection by analyzing the data, materials and parts used in the maintenance/alterations processes by air agencies and air operators.

5. GENERAL. A detailed process/task inspection is a surveillance activity that will examine one or more specific tasks that are associated with the overhaul, maintenance/alterations of a part or product. This inspection will evaluate the data, tooling, equipment, and processes used to complete one or more tasks.

7. INSPECTOR RESPONSIBILITIES.

A. Preparation. Prior to performing an inspection, it is important that aviation safety inspectors (ASI) and air agencies are well prepared. ASIs should be familiar, when applicable, with the following:

- Operations specifications (OpSpecs) (including the ratings, the specifications listed for limited specialized services, and the process specifications)
- Maintenance documentation (including the required work cards, the inspection forms, and the sign-off sheets)
- Applicable maintenance manuals (including the inspection procedures manuals, the air carrier manuals, the overhaul manuals, the current revisions and dates, and the process specifications
- Special Federal Aviation Regulations (SFAR) 36 authority
- Engineering Orders (EO)
- Required Inspection Items (RII)
- Supplemental Type Certificates (STC) and Parts Manufacturer Approval (PMA)
- Federal Aviation Administration (FAA) Form 8110-3, Designated Engineering Representative Data Approval
- FAA Form 337, Major Repair and Alteration

B. Coordination. A detailed process inspection will involve varying degrees of complexity. At times there may be a need for coordination with other offices (i.e., AEG, ACO, FSDO's, etc.), for clarification of procedures and processes.

NOTE: Geographic units need to establish close coordination with their certificate-holding district office (CHDO).

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SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR parts 43, 121, 125, 135, and 145, as applicable
- Successful completion of the Airworthiness Inspectors Indoctrination Course(s) or previous equivalent

B. Coordination. This task must be coordinated between an Airworthiness ASI and the operator.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References:

- OpSpecs
- Process specifications, if applicable
- Applicable maintenance manuals

B. Forms:

- FAA Form 8110-3, Designated Engineering Representative Data Approval
- FAA Form 337, Major Repair and Alteration

C. Job Aids. None.

5. PROCEDURES.

A. Prepare for the Inspection. Accomplish the following:

(1) Identify the process/task to be inspected.

(2) Identify those documents, which will verify the use of approved or accepted data, materials, tools, etc.

(3) Inform the appropriate personnel as to what particular process/task will be observed during the inspection.

(4) Verify the inspection criteria to be used.

NOTE: During this inspection, pay particular attention to any deviations from approved data or procedures. (DO NOT LET THEM CONTINUE.)

B. Perform the Inspection. The following steps are to serve as a guide on performing a process/task inspection. Certain steps may not be appropriate, depending on the complexity of the repair station or operator. Inspect/review the following, as applicable:

(1) Work instructions, to verify that:

(a) Work instructions have been prepared for all processes.

(b) Work instructions reflect the technical data contained in appropriate maintenance manuals or other approved documents.

(c) Work instructions define accept/reject criteria, required tools, test equipment, inspection equipment, details of method of inspection to be performed, and tolerance limits, as applicable.

(d) Work instructions denote and detail the function to be performed, sequence of operations, and inspection points to verify proper handling of products from one station to another through all phases.

(e) Revisions to work instructions have been approved, controlled, and documented.

(f) Traceability is maintained for the completion of all operations.

(2) Inspection instructions, to verify that:

(a) Inspection records, indicating the number of inspections made, conformance or nonconformance, and the action when the product is nonconforming, are maintained.

(b) When required, reinspections/retests are performed following additional maintenance.

(c) Assemblies are inspected for

conformity before closure.

(d) All required inspections and tests have been satisfactorily accomplished prior to final acceptance of the completed products/parts.

(e) Personnel performing RII inspections for an air carrier are identified and authorized by the carrier.

(f) Inspection personnel are not exceeding their area of authority.

(3) Data, to verify that:

(a) Personnel are provided with current technical data and changes.

(b) Inapplicable, inappropriate, illegible, or obsolete data is removed from areas of potential use.

(c) Nondestructive inspection (NDI) processes are reviewed for conformance with FAA-approved data.

(d) Process specification changes are submitted to the FAA for evaluation and approval.

(e) Tags, forms, and other documents used are controlled.

(4) Major repairs and alterations, to verify that:

(a) If the task involved a major repair or major alteration, that FAA-approved data was used to accomplish the task.

(b) SFAR 36 data used for major repairs has been approved by authorized individuals referenced in the operator's SFAR 36 procedures manual.

(c) The scope of the SFAR 36 authority has not been exceeded.

(d) The Designated Engineering Representative (DER)-approved data has been documented on FAA Form 8110-3.

(e) The DER is authorized by the cognizant Aircraft Certification Office (ACO) to approve the data.

(5) Materials/parts, to verify that:

(a) The materials, test records, and standards used in NDI are identified and controlled.

(b) When required, special identification and controls for materials or parts are identified and are in place prior to the materials/parts being used.

(c) When required, special handling and storage requirements for materials and parts are identified and being used.

(d) There is traceability of material or parts received from distributors and that the records of receiving inspection data are retained and list the name, part number, quantity, and inspection results.

(6) Tools and test equipment, to verify that:

(a) When required, special tools and test equipment are identified and used for an operation or process.

(b) Calibration records are maintained for all tools and test equipment requiring calibration.

(c) The facility's personnel are trained appropriately for their assignments.

7. TASK OUTCOMES.

A. Complete PTRS.

B. Complete the Task. Successful completion of this task may result in the following:

- Satisfactory inspection
- Requirement for a followup inspection for a particular discrepancy

C. Document Task. File all supporting paperwork in the operator's office file.

9. FUTURE ACTIVITIES. Normal surveillance.